Albion River Bridge Investigations Fact Sheet

Introduction

This Fact Sheet provides information about the results of a December 2014 investigation that Caltrans and its consultants conducted at the Albion River Bridge site related to wood treatment chemicals used in bridge wooden structural members and paint used on portions of the bridge. The 70 year Albion River Bridge is approximately 1000 feet long and 100 feet high and spans the Albion River Valley. It is constructed primarily of large Douglas Fir timbers treated with a wood preservative containing arsenic oxide, chromic acid, and cupric oxide. The wood preservative present on the bridge is no longer in commercial use.

A 130 foot long metal structural section of the bridge spanning the river channel, as well as the distinctive white bridge railing was painted with lead based paint prior to low lead paint reformulation. Past paint maintenance events may not have contained paint waste as is common practice today.

Investigations

Caltrans and their consultants have conducted two investigations at the bridge site. The first, completed in June 2014, termed a "bridge Survey," determined the concentration of wood preservative constituents in the structural members of the bridge for waste classification, the level of lead present in the bridge rail paint system, and if asbestos containing materials were present. This "survey" investigation provided a group of "constituents of concern" (COCs) used to direct the follow up investigation. The second investigation, termed a "preliminary Site Investigation" (PSI), completed in December 2014, focused on determining if a release of any COCs had occurred in the immediate vicinity of the bridge. All investigations to date have occurred within the 100-foot wide State Highway Right of Way at the bridge site.

Results of investigations

Analysis of soil samples at the bridge site provided the following information:

1. Arsenic: Concentrations of arsenic detected ranged from 1.6 to 120 parts per million (ppm). Concentrations were highest immediately adjacent to concrete bridge footings and decreased rapidly horizontally within a few feet of the concrete footings. The highest concentration detected a few feet or farther from the footings was 23 ppm.

2. Lead: Concentrations of lead detected ranged from 2.2 to 150 ppm. Concentrations of lead at all but three sample locations were below 70 ppm and most were significantly lower than that.

Analysis of storm water (water running off the bridge during a rain event) was found to contain arsenic at concentrations of 0.34 and 0.42 ppm.

Analysis of groundwater samples taken at locations under the bridge did not contain any detectable arsenic.

Action Taken

To ensure appropriate evaluation and address any community concerns, Caltrans has provided the investigation results to the Department of Toxic Substances Control (DTSC) and submitted an application for oversight. We anticipate that DTSC will evaluate the information obtained to date and then direct any future investigations and remedial activities needed.

DTSC Contact Information

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Availability of reports

Reports will soon be available at the at:

Fort Bragg Library
499 East Laurel Street
Fort Bragg, Ca 95437

The reports are also available on line at:

http://www.dot.ca.gov/dist1/d1projects/albion/

For questions about these reports, contact Phil Frisbie, Jr., Caltrans Public Information Officer, at 707-441-4678 or Phil_Frisbie@dot.ca.gov